

2013: what impact will the (national) fiscal measures have on growth?

By [Mathieu Plane](#)

This text supplements the [October 2012 forecasts for the French economy](#)

After having detailed the multiplier effects expected for the different fiscal policy instruments, the average domestic fiscal multiplier associated with the austerity measures being implemented in France in 2013 will be 0.9. This policy will cut GDP by 1.7% in one year alone. After a cumulative fiscal effort of 66 billion euros in 2011 and 2012, the structural saving expected for 2013 represents about 36 billion euros (1.8 GDP points) if we include both the measures in the 2013 budget bill (*Projet de loi de finances – PLF*) and the various measures adopted previously (Table). The fiscal shock resulting from the PLF for 2013 comes to 28 billion euros, of which 20 billion is solely on tax and social security contributions (*prélèvements obligatoires – PO*). Of the remaining 8 billion, an increase of nearly 5 billion euros in tax and social security contributions is from the second supplementary budget (*Loi de finances rectificative – LFR*) for the summer of 2012, the rest being mainly due to the first LFR for 2012 and to the hike in contributions resulting from the revision of the pension reform in summer 2012.

In total, the fiscal effort in 2013 can be broken down between tax and social contributions of about 28 billion euros (1.4 GDP points) and structural savings on primary public expenditure of 8 billion (0.4 GDP point). The burden of higher taxes and social contributions breaks down to nearly 16 billion euros for households and more than 12 billion for

business. This breakdown does not take into account the competitiveness measures announced on 6 November by the Prime Minister. The tax credits for competitiveness and employment (CICE) will not have any fiscal impact in 2013, with the exception of the possible establishment in 2013 of an advance on their future tax credits for some companies short of cash.

Based on the variants in the fiscal multiplier, made with e-mod.fr according to the economy's position in the cycle, for the main taxes and social security contributions as well as for the key components of public expenditure [\[1\]](#) and based on the different evaluations we were able to carry out, particularly in the context of [the assessment of the Five-year economic programme](#), we applied a specific fiscal multiplier to each measure for 2013 (Table). The short-term multipliers take into account only the direct effects of the measures on domestic activity, regardless of the fiscal policies of our trading partners, which amplify the impact of national policy. It is also assumed that monetary policy remains unchanged. The long-term multiplier values differ from the short-term ones, being generally lower unless a long-term negative output gap is maintained.

Of the 16 billion euro increase in tax and social security contributions on households in 2013, the discretionary increase in personal income tax (IR) will be 6.4 billion, including 3.2 billion from the 2013 Budget Act (*Loi de finances*) – against 4 billion in the PLF, as the proposal to tax capital gains on securities at the income tax scale will be largely amended, and the yield from the measure could decrease by about 0.8 billion, with the shortfall being able to be offset by the extension of the exceptional 5% contribution from the IS tax on large corporations), and with the rest coming from the supplemental LFR for 2012 (including 1.7 billion solely from the de-indexation of the personal income tax schedule). While the increase in personal income tax from the 2013 PLF is targeted at high earners, the amount

this will contribute (3.2 billion) represents only 11% of the increase in tax and social security contributions (20% if we limit ourselves to households) in 2013, and less than 9% of the total fiscal effort. According to our calculations, the average fiscal multiplier associated with the different measures that increase personal income tax will be 0.7 in 2013.

The increase in taxes and social contributions from households will come mainly from the increase in payroll taxes and social security contributions (8.7 billion euros) set out in the Social Security budget act (PLF) for 2013 (2.9 billion) and the measures in the supplemental LFR for 2013 (5.3 billion, which includes changes to the tax exemption on overtime, a limitation on tax breaks and employee savings, a higher CSG wealth tax on income from capital, etc.) and pension reform, with an increase in the contribution rate (0.5 billion). The average fiscal multiplier related to these measures is 0.9. Finally, the reform of inheritance tax will raise a further 1.1 billion in tax and social contributions. On the other hand, the revenue from the ISF wealth tax will be 1.3 billion lower than in 2012. Indeed, the yield from the one-off wealth tax contribution set up under the supplemental LFR for 2012 will be greater than from the one set up under the new reform in 2013. The fiscal multiplier for these two measures is 0.3.

In total, according to our calculations, the increase in levies on households in 2013 will on average have a multiplier of 0.8 and will amputate growth by 0.6 GDP point.

For business, the measures adopted mainly involve an increase in the corporate income tax as provided in the budget bill (PLF) for 2013 (8 billion euros, of which 4 billion is related to the reform of the deductibility of financial expenses). The average multiplier for the increase in the corporate income tax (IS) is estimated at 0.7 in 2013. 2.3 billion euros will come from a rise in social security contributions and payroll taxes with a fiscal multiplier of unity. Finally, other

measures such as the sectoral measures on the taxation of insurance or the exceptional contribution of the oil industry will increase the tax burden on business by 1.9 billion in 2013, with an average fiscal multiplier estimated at 0.5.

In our assessment, the increase in taxes and social contributions from companies will on average have a multiplier of 0.8 and will reduce GDP by 0.5 GDP point in 2013.

In addition, the short-term fiscal multiplier associated with public expenditure in a low phase of the cycle is, in our model, 1.3, so it is higher than that associated with tax and social contributions. This result is consistent with the most recent empirical literature (for details, see the box, "[Fiscal multipliers: size matters!](#)") The estimated loss of activity resulting from tightening up on public expenditure will come to 0.5 GDP point in 2013.

In total, the average domestic fiscal multiplier associated with the austerity policy being implemented in France in 2013 will be 0.9, and this policy will reduce GDP by 1.7%. This result is in the lower range of the [latest work of the IMF](#); using recent data on 28 countries, it has estimated the actual multipliers at between 0.9 and 1.7 since the beginning of the Great Recession.

Main measures affecting the structural public deficit in 2013

	Measures (in bn)	Fiscal multiplier estimated in the short term	Impact on GDP (%)
Households	15.7	0.8	-0.6
Income tax	6.4	0.7	-0.2
PLF 2013 (taxation of capital income at IR tax rate, new brackets, etc.)*	3.2	0.6	-0.1
LFR II 2012 (reversal of tax exemption of overtime)	0.5	0.4	0.0
LFR I 2012 (de-indexation of IR brackets, suppression tax breaks and Scellier scheme, etc.)	2.7	0.8	-0.1
ISF wealth tax	-1.3	0.3	0.0
PPLF 2013 (reform of ISF wealth tax)	1.0	0.3	0.0
LFR II 2012 (repercussions from one-off 2012 contribution)	-2.3	0.3	0.0
Inheritance tax	1.1	0.3	0.0
LFR II 2012 (reversal of breaks on inheritance tax)	1.1	0.3	0.0
Social contributions and payroll tax	8.7	0.9	-0.4
Social security PLF 2013 (reform of self-employed payroll tax, higher tax on beer and tobacco, etc.)	2.9	1.0	-0.1
LFR II 2012 (reversal of overtime exemption, limitation of tax breaks and employee savings, higher CSG wealth tax, capital income, etc.)	5.3	0.8	-0.2
Pension reform (higher contributions)	0.5	1.0	0.0
Other	0.8	0.6	0.0
PLF 2013 (higher tax on vacant housing, tougher "automobile malus", etc.)	0.9	0.6	0.0
LFR II 2012 (lower VAT on books)	-0.1	1.0	0.0
Business**	12.2	0.8	-0.5
Corporate income tax	8	0.7	-0.3
PLF 2013 (limits on financial expenses deductibility, reform of the "cinquième acompte", etc.)	8	0.7	-0.3
Payroll tax and social contributions	2.3	1.0	-0.1
Social security PLF 2013 (higher CNRACL contribution rate, reform on wage tax, etc.)	1.8	1.0	-0.1
Pension reform	0.5	1.0	0.0
Other	1.9	0.5	-0.1
PLF 2013 (sectoral measures on taxation of business insurance) (sectoral measures on taxation of business insurance)	1.3	0.8	-0.1
LFR II 2012 (one-off contribution of oil industry, taxation of financial transactions, etc.)	0.6	0.2	0.0
Total Business and Household Taxes and Contributions	27.9	0.8	-1.1
Structural saving on primary public expenditure	8.0	1.3	-0.5
Total fiscal impulse	35.9	0.9	-1.7

* This amount incorporates the downward revision of the yield initially foreseen in the PLF 2013 of the measure taxing capital gains at the personal income tax rate, which is to be offset by the extension of the exceptional 5% corporate income tax contribution for large corporations.

** This breakdown does not measure the final fiscal impact that is to be borne by households if the increase in business taxes is passed on in prices.

Sources : PLF 2013, Social security PLF 2013, LFR I and II 2012, OFCE calculations.

[1] For more on this, see Creel, Heyer, Plane, 2011, "Petit précis de politique budgétaire par tous les temps", *Revue de l'OFCE*, no. 116, January 2011.

What is the value of the fiscal multipliers today?

By [Xavier Timbeau](#)

We inherited higher public deficits and greatly increased public debts from the crisis (Table 1). Reducing these will require a major fiscal effort. But a programme that is too brutal and too fast will depress activity and prolong the crisis, not only compromising the fiscal consolidation effort but also locking the economies into a recessionary spiral. The value of the fiscal multiplier (the link between fiscal policy and economic activity) both in the short term and in the long term is thus a critical parameter for stabilizing the public finances and returning to full employment.

Public deficit and public debt 2007-2012

<i>In GDP points</i>	Public deficit		Net public debt minus financial assets	
	2012	Change 2012-2007	2012	Change 2012-2007
DEU	-0.9	-1.1	52	9
FRA	-4.5	-1.7	66	31
ITA	-1.7	-0.1	96	9
ESP	-5.4	-7.3	54	37
NLD	-4.3	-4.4	43	15
BEL	-2.8	-2.7	82	9
PRT	-4.6	-1.4	81	32
IRL	-8.4	-8.5	82	82
GRC	-7.4	-0.6	134	52
AUT	-2.9	-1.9	48	17
Euro area (EA11)	-3.0	-2.3	63	20
GBR	-7.7	-4.9	74	46
USA	-8.3	-5.3	85	37
JPN	-9.9	-7.8	134	54

Source : OECD, *Economic outlook* 91.

When the multiplier (in the short term) is greater than approximately 2 (actually $1/a$, a being the sensitivity of the public deficit to the economic cycle and valued at about 0.5 in the developed countries), then fiscal cutbacks produce such a decrease in activity that the short-term deficit increases with the cuts. When the multiplier is greater than approximately 0.7 (in fact, $1/(a+d)$, d being the ratio of debt to GDP), then fiscal restraint increases ratio of debt to GDP in the short term. In the longer term, things get complicated, and only a detailed modelling can help to understand in what circumstances today fiscal restraint would lead to a sustained reduction in the debt-to-GDP ratio. The value of the multiplier in the medium term is of course crucial (it is usually assumed to be null, or zero, but in the case of cost-effective public investment, this assumption does not hold), but hysteresis effects as well as changes in expectations about inflation or about sovereign interest rates (and therefore the critical gap, *i.e.* the gap between 10-year sovereign bond rates and the economy's nominal potential

growth rate) interact with changes in the debt and in GDP.

Until recently, most economists believed that the value of the multiplier depends on the composition of the fiscal stimulus (taxes, expenditure and the nature of taxes and expenditure), the size of the economy and its openness (the more open the economy, the lower its multiplier) and the existence of anticipations of a fiscal shock (an anticipated shock would have little effect, in the long term, it would have none, with only an unexpected shock having a temporary effect)[1]. [Recent literature \(since 2009\) has taken an interest](#) in the value of the fiscal multiplier in the short term in times of crisis . Two main conclusions emerge:

1. The multiplier is higher in “times of crisis” (in the short term or as long as the crisis lasts). In “times of crisis” means high unemployment or a very wide output gap. Another symptom may be a situation where safe long-term interest rates are very low (*i.e.* negative in real terms), suggesting a flight to safety (radical uncertainty) or a liquidity trap (expectations of deflation). Two theoretical interpretations are consistent with these manifestations of the crisis. One, price expectations are moving toward deflation, or radical uncertainty makes it impossible to form an expectation, which is consistent with very low safe interest rates and leads to the paralysis of monetary policy. Or second, more economic agents (households, firms) are subject to short-term liquidity constraints, perpetuating the recessionary spiral and preventing monetary policy from functioning. In one case as in the other, the fiscal multipliers are higher than in normal times because the expansionary fiscal policy (resp. restrictive) forces the economic agents to take on debt (resp. shed debt) collectively instead of individually. In “times of crisis” the multiplier is in play including when it is anticipated and its effect persists until a

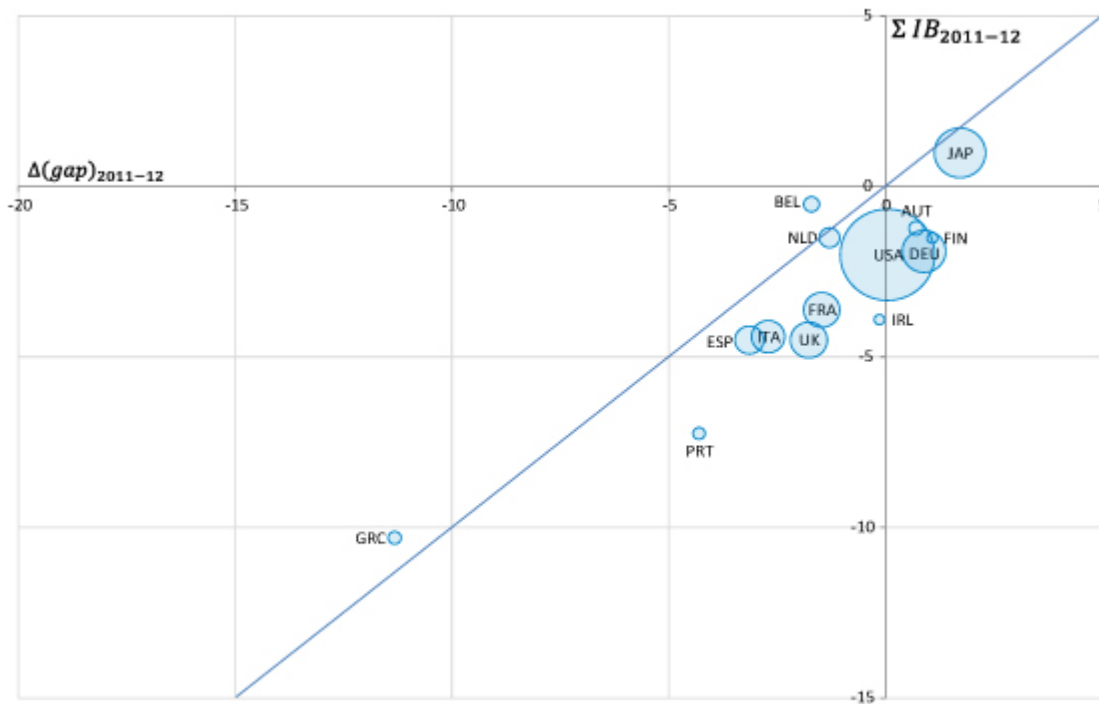
return to full employment.

2. The multiplier is higher for expenditures than it is for compulsory levies. The argument in normal times is that higher compulsory levies acts as a disincentive and spending cuts as an incentive on the supply of labour. In a small open economy, when monetary policy also induces a real depreciation of the currency, fiscal restraint can increase activity, a result that has long allowed supporters of fiscal discipline to promise all kinds of wonders. But in times of crisis, in addition to the fact that the multipliers are higher, the logic applicable in normal circumstances is reversed. The use of taxes as disincentives for the labour supply or spending cuts as incentives does not work in an economy dominated by involuntary unemployment or overcapacity. It is in fact the expectations of a recession or of deflation that act as disincentives, which is another factor indicating high multipliers.

Econometric estimates (based on past experience of “times of crisis”) lead to retaining a fiscal multiplier of around 1.5 (for an average mix of spending and compulsory levies).

Taking together 2011 and 2012, years in which a very strong fiscal impulse was carried out, confirms this econometric evaluation. By comparing on the one hand changes in the output gap from end 2010 to 2012 (on the abscissa) and on the other hand the cumulative fiscal impulse for 2011 and 2012, we obtain the short-term impact of the fiscal consolidation. Figure 1 depicts this relationship, showing a close link between fiscal restraint and economic slowdown.

Graphe 1 : Change in the output gap and the impulse 2011-2012



Source: OECD, *Economic Outlook 91*, June 2012. The year 2012 is a projection (OFCE forecast October 2012). The area of the bubbles is proportional to real GDP in 2011 (\$ PPP).

For most countries, the “apparent” multiplier is less than 1 (the lines connecting each of the bubbles are below the bisector, the “apparent” multiplier is the inverse of the slope of these lines). Figure 2 refines the evaluation. The changes in the output gap are in effect corrected for the “autonomous” dynamic of the closing of the output gap (if there had been no impulse, there would have been a closing of the output gap, which is estimated as taking place at the same rate as in the past) and for the impact of each country’s budget cutbacks on the others through the channel of foreign trade. The bubbles in orange therefore replace the blue bubbles, integrating these two opposing effects, which are evaluated here while seeking to minimize the value of the multipliers. In particular, because the output gaps have never been so extensive, it is possible that the gaps are closing faster than what has been observed in the last 30 or 40 years, which would justify a more dynamic counterfactual and therefore higher fiscal multipliers.

Austria and Germany are exceptions. As these two countries

enjoy a more favourable economic situation (lower unemployment, better business conditions), it is not surprising that the multiplier is lower there. Despite this, the “corrected apparent” multiplier is negative. This follows either from the paradoxical effects of the incentives, or more likely from the fact that monetary policy is more effective and that these two countries have escaped the liquidity trap. But the correction provided here does not take into account any stimulus from monetary policy.

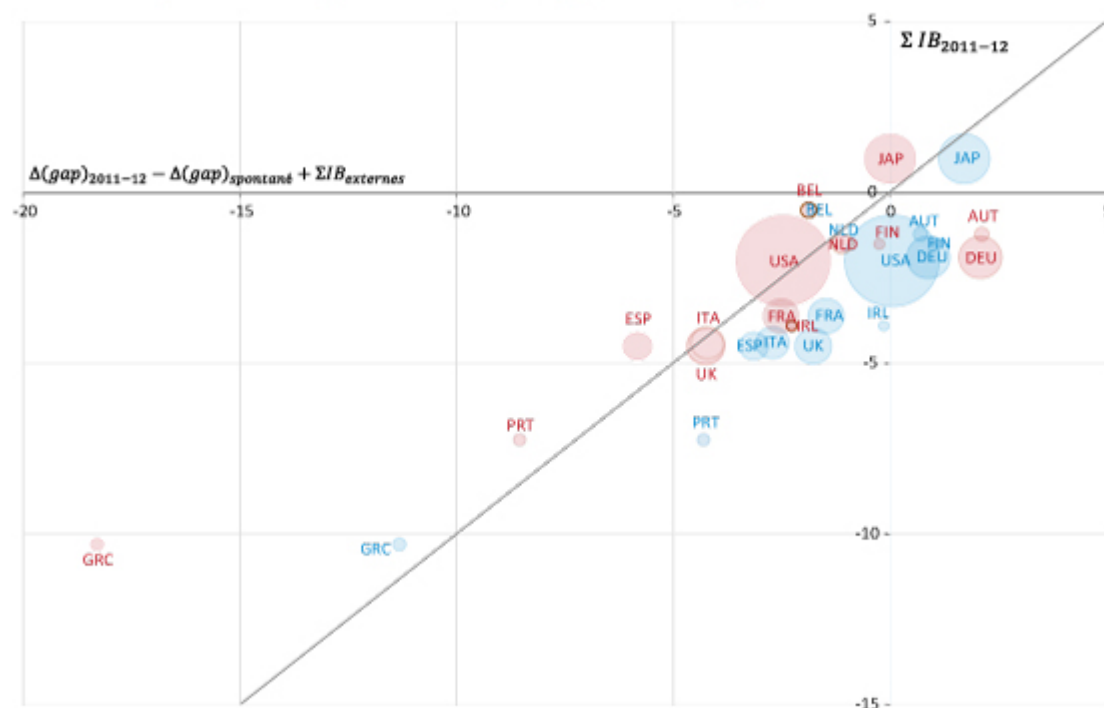
In the United States, the “2011-2012 corrected apparent” multiplier comes to 1. This “corrected apparent” multiplier is very high in Greece (~ 2), Spain (~ 1.3) and Portugal (~ 1.2), which is consistent with the hierarchy set out in point 1. This also suggests that if the economic situation deteriorates further, the value of the multipliers may increase, exacerbating the vicious circle of austerity.

For the euro zone as a whole, the “corrected apparent” multiplier results from the aggregation of “small open economies”. It is thus higher than the multiplier in each country, because it relates the impact of the fiscal policy in each country to the whole zone and no longer just to the country concerned. The aggregate multiplier for the euro zone also depends on the composition of the austerity package, but especially to the place where the measures are being implemented. However, the biggest fiscal impulses are being executed where the multipliers are highest or in the countries in the deepest crisis. The result is that the aggregate multiplier for the euro zone is 1.3, significantly higher than that derived from the US experience.

A comparison of the fiscal plans for 2011 and 2012 with the economic cycle in those years yields a high estimate for the fiscal multipliers. This confirms the dependence of the multiplier on the cycle and constitutes a serious argument against the austerity approach, which is to be continued in 2013. Everything indicates that we are in a situation where

austerity is leading to disaster.

Grappe 2 : Changes in the output gap and the impulse 2011-2012



Source: OECD, *Economic Outlook 91*, June 2012. The year 2012 is a projection (OFCE forecast October 2012). The area of the bubbles is proportional to real GDP in 2011 (\$ PPP).

[11] There has been an intense debate about the theoretical and especially the empirical validity of these assertions (see [Creel, Heyer and Plane 2011](#) and [Creel, Ducoudré, Mathieu and Sterdyniak 2005](#)). Recent empirical work undertaken for example by the IMF has contradicted the analyses made in the early 2000s, which concluded that anti-Keynesian effects dominate Keynesian effects. Thus, at least with regard to the short term, before the crisis and in “normal times”, the diagnosis today is that the fiscal multipliers are positive. The endogeneity of measurements of a fiscal impulse by simply varying the structural deficit interfered with the empirical analysis. The use of a narrative record of fiscal impulses addresses this issue and significantly alters estimates of the multipliers. In most macroeconomic models (including dynamic stochastic general equilibrium – DGSE – models), the fiscal

multipliers are also positive in the short term (on the order of 0.5 for a pure fiscal shock “in normal times”). In the long run, the empirical analysis does not tell us much, as the noise drowns out any possibility of measurement. The long term therefore reflects mainly an *a priori* theory that remains largely dominated by the idea that fiscal policy can have no long-term effect. However, in the case of public investment or of possible hysteresis, the assumption of a non-null effect in the long run seems more realistic.

A review of the recent literature on fiscal multipliers: size matters!

By [Eric Heyer](#)

Are the short-term fiscal multipliers being underestimated? Is there any justification for the belief that fiscal restraint can be used to drastically reduce deficits without undermining business prospects or even while improving the medium-term situation? This is the question that the IMF tries to answer in its latest [report on the world economic outlook](#). The Fund devotes a box to the underestimation of fiscal multipliers during the 2008 crisis. While until 2009 the IMF had estimated that in the developed countries they averaged about 0.5, it now calculates that they have ranged from 0.9 to 1.7 since the Great Recession.

This reassessment of the value of the multiplier, which [X. Timbeau discusses in an interesting reading](#) on the basis of a

“corrected apparent” multiplier, builds on the numerous studies carried out by IMF researchers on the issue and especially that of [Batini, Callegari and Melina \(2012\)](#). In this article, the authors draw three lessons about the size of the fiscal multipliers in the euro zone, the U.S. and Japan:

1. The first is that gradual and smooth fiscal consolidation is preferable to a strategy of reducing public imbalances too rapidly and abruptly.
2. The second lesson is that the economic impact of fiscal consolidation will be more violent when the economy is in recession: depending on the countries surveyed, the difference is at least 0.5 and may be more than 2. This observation was also made in another study by the IMF ([Corsetti, Meier and Müller \(2012\)](#)) and is explained by the fact that in “times of crisis” more and more economic agents (households, firms) are subject to very short-term liquidity constraints, thus maintaining the recessionary spiral and preventing monetary policy from functioning.
3. Finally, the multipliers associated with public expenditure are much higher than those observed for taxes: in a recessionary situation, at 1 year they range from 1.6 to 2.6 in the case of a shock to public spending but between 0.2 and 0.4 in the case of a shock on taxes. For the euro zone, for example, the multiplier at 1 year was 2.6 if government spending was used as an instrument of fiscal consolidation and 0.4 if the instrument was taxation.

As the economic crisis continues, the IMF researchers are not the only ones raising questions about the merits of the fiscal consolidation strategy. In an NBER working paper in 2012, two researchers from Berkeley, [Alan J. Auerbach and Yuriy Gorodnichenko](#), corroborate the idea that the multipliers are higher in recessions than in periods of expansion. [In a second study](#), published in the *American Economic Journal*, these same

authors argue that the impact of a shock on public expenditure would be 4 times greater when implemented during an economic downturn (2.5) than in an upturn (0.6). This result has been confirmed for the US data by three researchers from the University of Washington in St. Louis ([Fazzari et al. \(2011\)](#)) and by two economists at the University of Munich ([Mittnik and Semmler \(2012\)](#)). This asymmetry was also found for the data on Germany in a study by a Cambridge University academic and a Deutsche Bundesbank researcher, [Baum and Koester \(2011\)](#).

In other work, a researcher at Stanford, [Hall \(2009\)](#), affirms that the size of the multiplier doubles and is around 1.7 when the real interest rate is close to zero, which is characteristic of an economy in a downturn, as is the case today in many developed countries. This view is shared by a number of other researchers, including two at Berkeley and Harvard, [DeLong and Summers \(2012\)](#), two from the Fed, [Erceg and Lindé \(2012\)](#), those of the [OECD \(2009\)](#), those of the [European Commission \(2012\)](#) and in some recent theoretical work ([Christiano, Eichenbaum and Rebelo \(2011\)](#), [Woodford \(2010\)](#)). When nominal interest rates are blocked by the zero lower bound, anticipated real interest rates rise. Monetary policy can no longer offset budgetary restrictions and can even become restrictive, especially when price expectations are anchored on deflation.

As already noted by J. Creel on this blog ([**insert link to the post of 22.02.12**](#)) with respect to the instrument to be used, *i.e.* public spending or taxation, other IMF economists together with colleagues from the European Central Bank (ECB) the US Federal Reserve (FED), the Bank of Canada, the European Commission (EC) and the Organization for Economic Cooperation and Development (OECD) compared their assessments in an article published in January 2012 in the *American Economic Journal: Macroeconomics* ([Coenen G. et al. \(2012\)](#)). According to these 17 economists, on the basis of eight different macroeconometric models (mainly DSGE models) for the United

States, and four models for the euro zone, the size of many multipliers is large, particularly for public expenditure and targeted transfers. The multiplier effects exceed unity if the strategy focuses on public consumption or transfers targeted to specific agents and are larger than 1.5 for public investment. For the other instruments, the effects are still positive but range from 0.2 for corporation tax to 0.7 for consumer taxes. This finding is also shared by the [European Commission \(2012\)](#), which indicates that the fiscal multiplier is larger if the fiscal consolidation is based on public expenditure, and in particular on public investment. These results confirm those published three years ago by the [OECD \(2009\)](#) as well as those of economists from the Bank of Spain for the euro zone ([Burriel et al \(2010\)](#)) and from the Deutsche Bundesbank using data for Germany ([Baum and Koester \(2011\)](#)). Without invalidating this result, a study by [Fazzari et al \(2011\)](#) nevertheless introduced a nuance: according to their work, the multiplier associated with public spending is much higher than that observed for taxes but only when the economy is at the bottom of the cycle. This result would be reversed in a more favourable situation of growth.

Furthermore, in their assessment of the US economy, researchers at the London School of Economics (LSE) and the University of Maryland, [Ilzetzki, Mendoza and Vegh \(2009\)](#), highlight a high value for the fiscal multiplier for public investment (1.7), *i.e.* higher than that found for public consumption. This is similar to the results of other IMF researchers ([Freedman, Kumhof, Laxton and Lee \(2009\)](#)).

In the recent literature, only the work of Alesina, a Harvard economist, seems to contradict this last point: after examining 107 fiscal consolidation plans, conducted in 21 OECD countries over the period 1970-2007, Alesina and his co-authors ([Ardagna in 2009](#) and [Favero et Giavazzi in 2012](#)) conclude first that the multipliers can be negative and second that fiscal consolidations based on expenditure are associated

with minor, short-lived recessions, while consolidations based on taxation are associated with deeper, more protracted recessions. In addition to the emphasis on the particular experiences of fiscal restraint (Scandinavian countries, Canada), which are not found when including all experiences with fiscal restriction (or expansion), the empirical work of Alesina *et al.* suffers from an endogeneity problem in the measurement of fiscal restraint.

The notion of a narrative record of fiscal impulse helps to avoid this endogeneity. For example, in the case of a real estate bubble (and more generally in cases of large capital gains), the additional tax revenues from the real estate transactions results in a reduction in the structural deficit, as these revenues are not cyclically based (the elasticity of revenues to GDP becomes much higher than 1). So these are associated with an expansionary phase (in conjunction with the housing bubble) and a reduction in the structural deficit, which artificially strengthens the argument that reducing the public deficit may lead to an increase in activity, whereas the causality is actually the reverse.

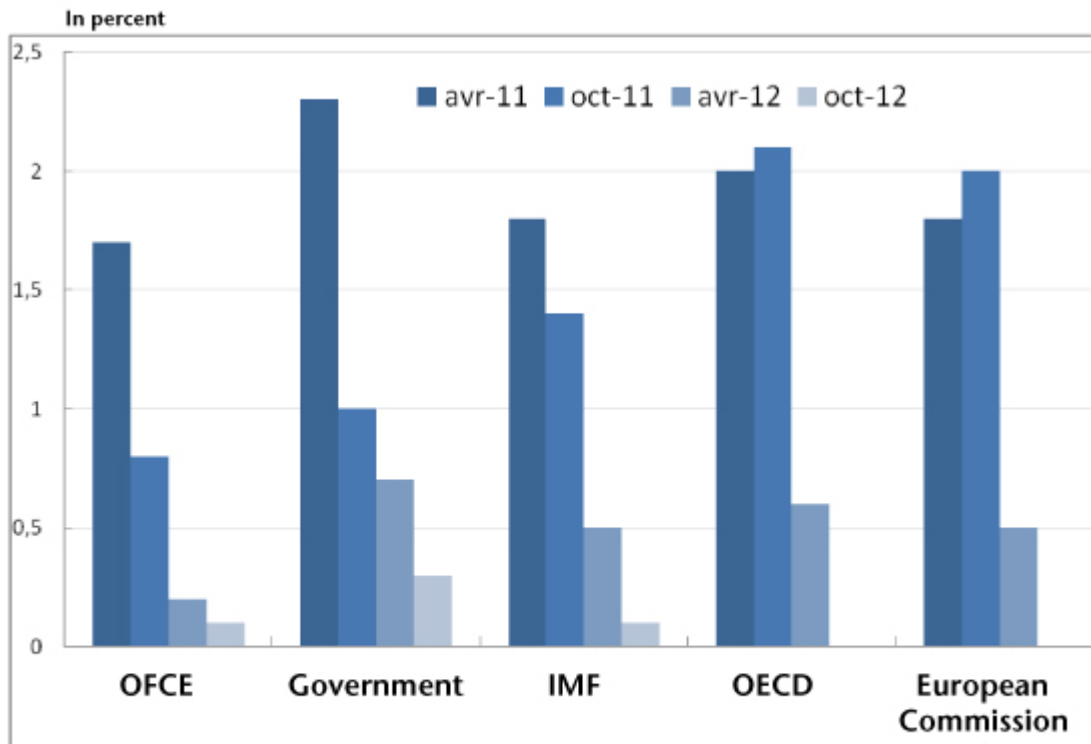
With the exception of the work of Alesina, a broad consensus emerges from the recent theoretical and empirical work in the existing economic literature: a policy of fiscal consolidation is preferable in periods of an upturn in activity, but is ineffective and even pernicious when the economy is at a standstill; if such a policy is to be enacted in a downturn, then tax increases would be less harmful to the activity than cuts in public spending ... all recommendations contained in [Creel, Heyer and Plane \(2011\)](#).

Why has French growth been revised downwards?

By Bruno Ducoudré and [Eric Heyer](#)

In its [October 2012 forecasts](#), the OFCE has revised its growth forecast for 2012 and 2013. The major international institutions, the OECD, the IMF and the European Commission, also regularly review their growth forecasts to incorporate newly available information. An analysis of these revised forecasts is particularly interesting in that it shows that these institutions use low fiscal multipliers in developing their forecasts. In other words, the recessionary impact of fiscal policy has been underestimated by the OECD, the IMF and the European Commission, leading to substantial revisions of their growth forecasts, as is evidenced by the dramatic shifts by the [IMF](#) and the [European Commission](#) in the size of the multipliers.

Graphique 1. Révisions of growth in French GDP for 2012



Note : Growth in 2012 is reviewed four times each year by each institution. The first revision took place in April 2011, the second in October 2011, the third in April 2012 and the final one in October 2012. The OECD has not yet published its latest revisions.

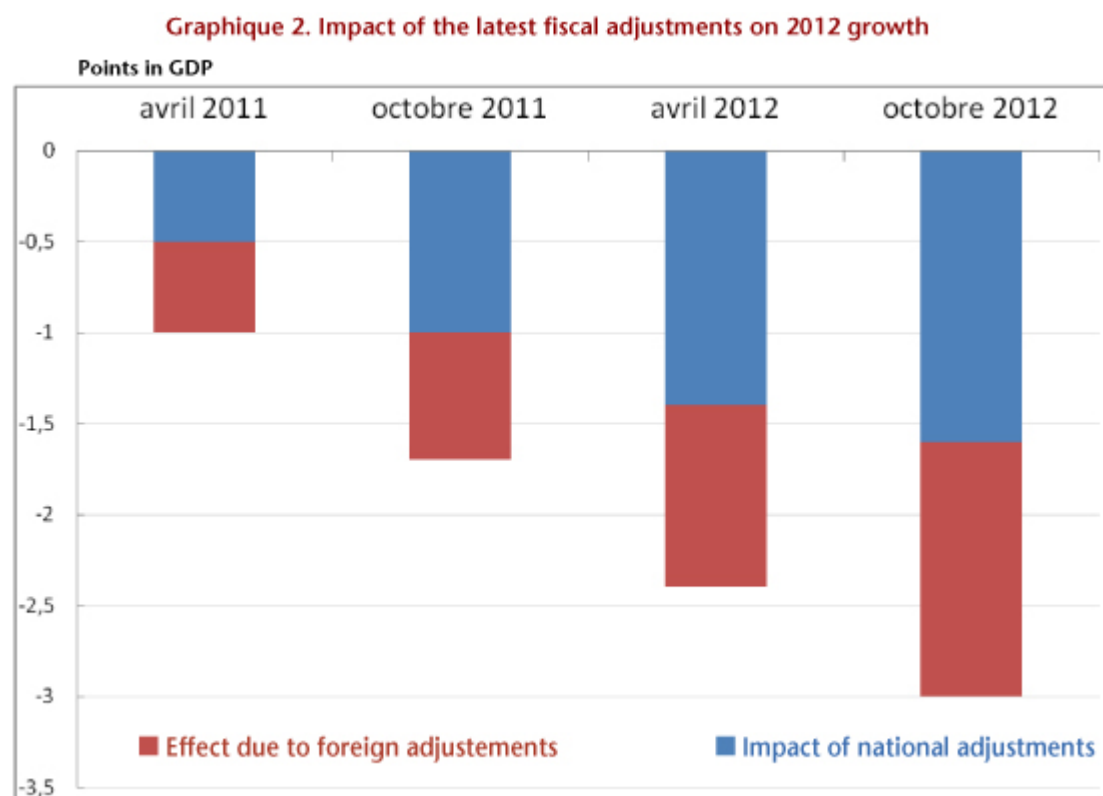
Sources : IMF, European Commission, OECD, OFCE October 2012 calculations and forecasts.

Figure 1 shows that between the forecast made in April 2011 and the latest available forecast, the government, like all the other institutions, revised its growth forecast for France sharply downwards.

The austerity policies have also been strengthened at the same time, particularly in the euro zone. The European countries undertook their stability program in order to return to balanced public finances within three years. In contrast to the years before the crisis, the implementation of these commitments is now considered a necessary or even sufficient condition for pulling out of the crisis. Moreover, in a context of financial uncertainty, being the only State not to meet its commitment to fiscal consolidation would be punished immediately by the markets (higher sovereign rates, a downgraded rating, a fine from the European Commission, implicit contagion of sovereign defaults). But in trying to reduce their deficits abruptly and synchronously, Europe's governments are inducing new slowdowns in activity.

A vicious circle has been created: with each downward revision in their forecasts for 2012 growth, Europe's governments implement new austerity measures to meet their deficit commitments. This has happened in France, but especially in Italy, which has virtually tripled its fiscal effort, and in Spain, which is now engaged in the greatest austerity effort of any major European country.

According to our estimates for the French economy (that is to say, using a multiplier of 1), the series of fiscal savings plans adopted at the national level have led to revising growth downwards by -1.1 points between April 2011 and October 2012 (from an impact of -0.5 GDP point to -1.6 points). Since these same policies are in force in our trading partners, this has led to revising growth for this same period by 0.9 point due to foreign trade (from -0.5 GDP point to -1.4 point) (Figure 2).



Source : OFCE October 2012 calculations and forecasts.

For the year 2012, the OFCE's revisions for the French economy can be explained in full simply by the escalation in the fiscal savings measures announced over the last 12 months,

i.e. the national plans and those applied by our partner countries (Table 1).

Tableau 1. Determinants of the revisions to the OFCE forecast for France for 2012

	April 2011	October 2012	Revision
GDP growth	1,7	0,1	-1,6
(a) - Austerity measures (in GDP pt)	-0,6	-1,60	-1,0
(b) – Value of the fiscal multiplier	0,95	0,95	0,0
Impact of austerity plans in France (a + b)	-0,5	-1,6	-1,1
Impact of the austerity measures of France's partners	-0,5	-1,4	-0,9
Other adjustment factors			0,4

Source : OFCE calculations.

Leaving aside this escalation of austerity, our diagnosis of the French economy has changed very little over the last 18 months: without it, we would have even revised our growth forecast slightly upwards (0.4%).

Has monetary policy become ineffective?

By [Christophe Blot](#), [Catherine Mathieu](#) and Christine Riffart

This text summarizes the [special study](#) of the October 2012 forecast.

Since the summer of 2007, the central banks of the industrialized countries have intervened regularly to counter the negative impact of the financial crisis on the functioning of the banking and financial system and to help kick-start growth. Initially, key interest rates were lowered considerably, and then maintained at a level close to 0 [\[1\]](#). In a second phase, from the beginning of 2009, the central

banks implemented what are called unconventional measures. While these policies may differ from one central bank to another, they all result in an increase in the size of their balance sheets as well as a change in the composition of their balance sheet assets. However, three years after the economies in the United States, the euro zone and the United Kingdom hit bottom, it is clear that recovery is still a ways off, with unemployment at a high level everywhere. In Europe, a new recession is threatening [\[2\]](#). Does this call into question the effectiveness of monetary policy and of unconventional measures more specifically?

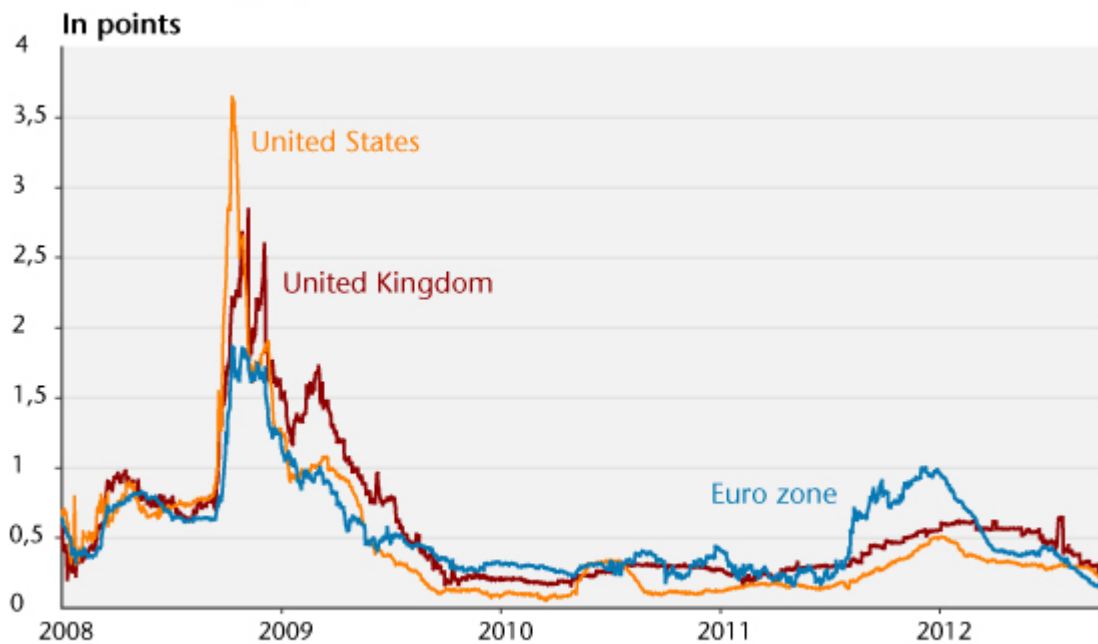
For almost four years, a wealth of research has been conducted on the impact of unconventional monetary policies [\[3\]](#). Cecioni, Ferrero and Sacchi (2011) [\[4\]](#) have presented a review of recent literature on the subject. The majority of these studies focus on the impact of the various measures taken by the central banks on financial variables, in particular on money market rates and bond yields. Given the role of the money market in the transmission of monetary policy, the ability of central banks to ease the pressures that have emerged since the beginning of the financial crisis constitutes a key vector for effective intervention. More recently, this was also one of the reasons motivating the ECB to conduct an exceptional refinancing operation in two stages, with a maturity of 3 years. This intervention has indeed helped to reduce the tensions on the interbank market that had reappeared in late 2011 in the euro zone, and to a lesser extent in the United States and the United Kingdom (see graph). This episode seems to confirm that central bank action can be effective when it is dealing with a liquidity crisis.

Another critical area of debate concerns the ability of unconventional measures to lower interest rates in the long term and thereby to stimulate activity. This is in fact an important lever for the transmission of monetary policy. The findings on this issue are more mixed. Nevertheless, for the

United States, a study by Meaning and Zhu (2012) [\[5\]](#) suggests that Federal Reserve programs to purchase securities have contributed to lowering the rates on 10-year US Treasury bills: by 60 points for the first “Large-scale asset purchase” program (LSAP1) and by 156 points for LSAP2. As for the euro zone, Peersman [\[6\]](#) (2011) shows that the impact of unconventional measures on activity has in general closely resembled the effect of lowering the key interest rate, and Gianone, Lenza, Pill and Reichlin [\[7\]](#) (2012) suggest that the various measures taken by the ECB since the beginning of the crisis have helped offset the rise in the unemployment rate, although the impact is limited to 0.6 point.

Under these conditions, how is it possible to explain the weakness or outright absence of a recovery? One answer evokes the hypothesis of a liquidity trap [\[8\]](#). Uncertainty is still prevalent, and the financial system is still so fragile that agents are continuing to express a preference for liquidity and safety, which explains their reluctance to undertake risky projects. Thus, even if financing conditions are favourable, monetary policy will not be sufficient to stimulate a business recovery. This hypothesis probably explains the timidity of the recovery in the United States. But in the euro zone and the United Kingdom this hypothesis needs to be supplemented with a second explanation that recognizes the impact of restrictive fiscal policies in holding back recovery. The euro zone countries, like the UK, are pursuing a strategy of fiscal consolidation that is undermining demand. While monetary policy is indeed expansionary, it is not able to offset the downward pressure of fiscal policy on growth.

Graphique. Tensions on the interbank markets*



* The tensions are measured by the spread between the interbank rates (Libor ou Euribor) and the overnight interest rate swap (OIS).

Source : Datastream.

[1] One should not, however, forget the exception of the ECB, which prematurely raised its key interest rate twice in 2011. Since then it has reversed these decisions and lowered the key rate, which has stood at 0.75% since July 2012.

[2] The first estimate of UK GDP for the third quarter of 2012 indicates an upturn in growth following three quarters of decline. However, this rebound is due to unusual circumstances (see [Royaume-Uni: l'enlissement](#)), and activity will decline again in the fourth quarter.

[3] Unconventional monetary policies have already been analyzed repeatedly in the case of the Bank of Japan. The implementation of equivalent measures in the United States, the United Kingdom and the euro zone has contributed to greatly amplifying the interest in these issues.

[4] ["Unconventional monetary policy in theory and in practice"](#), *Banca d'Italia Occasional Papers*, no.102.

[5] ["The impact of Federal Reserve asset purchase programmes:](#)

[another twist](#)", *BIS Quarterly Review*, March, pp. 23-30.

[6] "[Macroeconomic effects of unconventional monetary policy in the euro area](#)", ECB Working Paper no.1397.

[7] "[The ECB and the interbank market](#)", CEPR Discussion Paper no. 8844.

[8] See [OFCE](#) (2010) for an analysis of this hypothesis.

Pigeons: how to tax entrepreneurial income? (2/2)

By [Guillaume Allègre](#) and [Xavier Timbeau](#)

After having proposed in the [2013 Budget Bill](#) to tax gains from the sale of securities at the progressive scale used by France's income tax, and no longer at a proportional rate of 19%, the government has now promised to correct its course, under the pressure of a group of entrepreneurs who rallied on the social networks under the hashtag #geonpi ("pigeons", using French verlan slang, which inverts syllables). [An amendment proposed by the government](#) introduces an exemption from the income tax rate on the condition of a specified period of ownership (2 years), a percentage of ownership of the shares (10% of voting rights) and status as an employee or director. Entrepreneurs will thus remain subject to the proportional tax rate of 19%. [In a first post](#), we described how capital gains should be taxed in an equitable way with levies on income from work. In what conditions could

entrepreneurs and people with a significant stake in a company justify special treatment of their gains from the sale of securities?

At first glance, the joint taxation of capital income and labour income is particularly relevant for entrepreneurs, who can choose to pay themselves either in the form of wages or in the deferred form of capital gains. In this context, the neutrality of the tax is fair and effective in so far as it does not distort the entrepreneur's choice.

Advocates for the special treatment of entrepreneurship advance several arguments: (1) Entrepreneurship contributes a strong positive externality in terms of innovation, growth and employment. (2) Entrepreneurs are deserving (they work hard and take risks). (3) The risks taken by entrepreneurs cannot be diversified. They cannot offset their capital losses and gains, so the taxation of capital gains in itself reduces the *ex-ante* yield from entrepreneurship, and therefore the number of entrepreneurs, growth and employment.

The counter-arguments to this are:

(1) Income tax is a poor instrument for taking into account externalities: from this perspective, researchers, teachers, social workers, doctors, and in general all occupations in activities that produce externalities (health , education, culture, etc.) could claim a tax benefit (journalists have already managed to hold their own), so what is to be feared, in this context, is that the tax benefit reflects the level of influence rather than the economic externality.

(2) From the point of view of equity, there is no reason to treat labour income and the risky income of entrepreneurs differently. Young people without connections who engage in long-term studies also take a risk: like entrepreneurs, they forego an immediate wage income for an uncertain future income (they may fail in their studies or choose a poorly paid

career, etc.). The entrepreneur's income already takes into account the risk and the effort: it is because entrepreneurship is risky and demanding that it is potentially profitable. The government cannot – and should not – distinguish the share of income (labour or capital) that derives from risk, effort and talent from the share that is the fruit of chance, social networks and circumstance. Finally, taking risk into account by rewarding those who have the good fortune to emerge as winners (those with capital gains) reflects a peculiar vision of equity: in the presence of chance, equity advocates compensating the losers rather than adding to the rewards of the winners.

(3) In terms of efficiency, in the presence of a chance event, compensating the losers acts as insurance, which encourages risk-taking. Domar and Musgrave (1944) emphasized long ago that the proportional taxation of income from business encourages the taking of entrepreneurial risk. This result is based on the assumption of a negative income tax in the presence of losses, so that the State acts as a supportive partner. While this assumption is justified for large corporations that can consolidate the gains and losses of their subsidiaries and / or carry forward certain losses, it is less legitimate for entrepreneurs who cannot diversify the risks they take. The limited liability company, the limitation on the goods that the entrepreneur can pledge, the possibility of being able to refuse an inheritance so that any eventual debts (including tax and social charges) of entrepreneurs facing failure can then be wiped clean (whereas any eventual assets, if successful, may be transmitted) are all devices that favour individual risk-taking. A more favourable tax treatment for the allocation and carrying-forward of shortfalls and capital losses for entrepreneurs and individuals who hold a significant proportion of a company could enhance these opportunities and increase the incentives for entrepreneurship.

Entrepreneurs need to have the benefit of a legal and administrative environment that is simple and accessible. The authorities can strengthen the entrepreneurial ecosystem by bringing together entrepreneurs, financiers (in particular France's Public Investment Bank), incubators and research laboratories.

Ex-post, from the point of view of equity as well as efficiency, it is the entrepreneurs who fail, and not those who succeed, that must be helped via personal bankruptcy laws, unemployment compensation, and favourable tax systems for deductibility and carrying forward losses. Implicit subsidies for those who succeed, through income tax, while the potential rewards are already extremely large, are instead a form of social Darwinism.

Should households pay for a competitiveness shock?

By [Henri Sterdyniak](#)

France is suffering from an industrial problem. Its current account balance went from a surplus of 2.6% of GDP in 1997 to a deficit of 1% in 2007 and then 2% in 2012, while Germany went from a deficit of 0.4% of GDP in 1997 to a surplus of 5.7%. This raises the issue of France's industrial recovery. Should a major transfer take place from households to large companies for the purpose of a competitiveness shock or to redress business margins? There are many who advocate such a

shock (including the MEDEF, but also the CFDT). This would reduce employers' social contributions (by at least 30 billion euros) and in return increase levies on households. The issue of France's industrial recovery is discussed in detail in the latest [Note de l'OFCE \(No. 24 of 30 October 2012\)](#).

It is out of the question to reduce the social security contributions of employees, as these finance only retirement and unemployment benefits, and thus contributory benefits that depend on the contributions paid and that cannot be financed through taxes. Only employer contributions intended for the family or health insurance can be reduced. And then it's necessary to find a substitute resource: VAT or the CSG wealth tax?

In fact, there is little difference between an increase in the CSG tax and an increase in VAT. In both cases, households will lose purchasing power. In the case of a VAT increase, this would involve higher prices. However, inflation is automatically reflected in the minimum wage and social benefits, and after wage bargaining, in salaries too, so any gain in business competitiveness / profitability is likely to be temporary unless indexing is suspended. In contrast, the victims of a higher CSG would not enjoy automatic indexing mechanisms and would have to accept a reduction in purchasing power. Using the CSG thus makes for a more long-term option.

The big issue at the macroeconomic level is the reaction of companies, which will have to arbitrate between maintaining their prices to rebuild their margins or lowering their prices to become more competitive.

Let's imagine ourselves in a country with a GDP of 100 and exports and imports of 25. The share of wages (including employer contributions) and consumption is 80, and the share of profits and investment is 20. In the short run, wages and pensions are fixed. The reform consists of reducing the amount of employer contributions by 5 (*i.e.* 5% of GDP), while

increasing the CSG tax by the same amount Two scenarios can be adopted based on the pricing policy chosen by companies.

In the first case, the companies maintain their prices and increase their margins. There is no *ex post* gain in business competitiveness, but profitability rises. Wages suffer a loss of 6.25% of their purchasing power (*i.e.* $5/80$). Will the revival in investment offset the fall in consumption? Let's use standard assumptions, *i.e.* a propensity to consume wages of 0.8 and to invest profits of 0.4, with a multiplier of 1. GDP falls in the short term by 2% and employment first drops and then eventually recovers due to the substitution of labour for capital. The measure is costly in terms of purchasing power, and higher employment is not ensured.

In the second case, the companies fully pass on the reduction in charges in their producer prices, which fall by 5%, with consumer prices decreasing by 4% (as the prices of imported goods remain stable). The purchasing power of wages is down by only 1%. The gains in competitiveness come to 5%. Will the gains in foreign trade offset the reduction in consumption? With a price elasticity of exports of 1 and of imports of 0.5, GDP increases by 1.25%. The measure is less painful.

Should it be done?

The government needs to ask households to accept a reduction in their income, even though they have already lost 0.5% in purchasing power in 2012, consumption stagnated in 2011 and 2012, France is in a state of recession, and demand is already too low.

Should France adopt Germany's strategy: to gain competitiveness at the expense of household purchasing power, knowing that this strategy is a losing one at the level of the euro zone as a whole? Admittedly, this would replace the devaluation that is impossible today in the euro zone, but it would hurt our European partners (which could even respond, to

our detriment) and it does not guarantee gains in competitiveness vis-à-vis countries outside the euro zone, which depends primarily on changes in the exchange rate for the euro. Nor would a measure like this replace a reform of the zone's economic policy. Finally, it takes time for gains in competitiveness to translate into renewed growth. For instance, from 2000 to 2005, French growth came to 7.8% (1.55% per year), and German growth to 2.7% (0.55% per year). Can France afford to lose another 5 percentage points of GDP?

France is in an intermediate position between the Northern countries which have made strong gains in competitiveness at the expense of purchasing power and the Southern countries which have experienced excessive wage increases. On a base of 100 in 2000, the level of real wages in 2011 was 97.9 in Germany and 111.2 in France (an increase of 1% per year, corresponding to trend gains in labour competitiveness). Who is wrong? Should we ask the employees in the euro zone countries, first one then another, to become more competitive than the employees of their partner countries by accepting wage cuts?

The margin of French companies was 29.6% in 1973. This fell to 23.1% in 1982, rebounded to 30.2% in 1987, and was 30.8% in 2006, *i.e.* a satisfactory level. The decline occurring since then (28.6% in 2011) can be explained by the drop-off in activity and the retention of labour. It was not caused by higher taxation nor by excessive wage increases. Overall, the share of profits has returned to a satisfactory level historically. But in 1973 gross fixed capital formation was around the level of profits, while it is lower by 3 points of added value today and the share of net dividends paid has increased significantly. What commitments would business make in terms of investment and employment in France in exchange for a measure that would greatly boost profits? How could companies be prevented from increasing their dividends or their investments abroad?

Making use of an internal devaluation like this implies that France is suffering primarily from a lack of price competitiveness. However, deindustrialization undoubtedly has other deeper causes. Companies prefer to develop in the emerging countries; young people are rejecting poorly paid industrial careers with an uncertain future; France is failing to protect its traditional industries or to develop in innovative sectors; the financial sector has favoured the joys of speculation over financing production and innovation; and so forth. All this will not be solved by an internal devaluation.

France needs a big industrial leap forward. It needs to carry out a different strategy: it is growth that must rebuild business margins, and it is industrial policy (via France's Public Bank Investment [the BPI], research tax credits, competitiveness clusters, support for innovative companies and for certain threatened sectors, and industrial planning) that must ensure an industrial recovery. This should be funded by the BPI, which needs to have sufficient capacity for action and specific criteria for its interventions.

Long-term competitiveness based on an environmental tax

By [Jacques Le Cacheux](#)

“Shock” or “Pact”? The debate over the loss of France's competitiveness has recently focused on how fast a switchover from employer payroll taxes to another type of financing is being implemented, implying that the principle of doing this

has already been established. As France faces a combination of a deteriorating situation in employment and the trade balance, plus growing evidence that its companies are becoming less competitive compared to those of most of our partners [1] and that business margins are alarmingly low for the future, the need to reduce labour costs seems to be clear. But how and how fast are subject to debate. Should there be a rise in the CSG tax, VAT, or other charges, at the risk of reducing the purchasing power of households in an economic context that is already worse than bleak?

The economic situation has to be managed at the euro zone level

The value of switching a portion of charges on employers – a figure of 30 billion is often bandied about – over to another levy is often disputed by invoking the risks that such a strategy would pose to what is already sluggish growth: undermining consumption would further curtail business opportunities, hurting activity and thus employment and margins.

But France is in this depressed situation only because the European Union is committed to a forced march of fiscal adjustment that everyone – or almost everyone – now recognizes is counterproductive and doomed to failure: as the heartbreaking situation in Spain illustrates, the quest to reduce the budget deficit when the economy is in recession is futile, and “virtuous” efforts – repeatedly slashing public spending and increasing taxes – merely weaken the economy further and increase unemployment, since the fiscal multipliers are very high, as Keynes demonstrated over 70 years ago!

Fiscal support for economic activity is the only way out. But the experience of the early years of the first Socialist government is alive in all our memories: the failure was as great as were the illusions, and the “turn to austerity” made

the government unpopular. An approach that failed in the context of the early 1980s, with a less open economy, an autonomous monetary policy and the possibility of adjusting the currency's exchange rate, is all the less appropriate in the context of deeper integration and the single currency. Trying to maintain the purchasing power of French households while the rest of the euro zone is in recession and French companies are less competitive could only widen the deficit without boosting growth or employment.

We must therefore continue the fight in Europe: to slow down the pace of deficit reduction; to implement a more accommodative monetary policy in the euro zone, which would have the double advantage of reducing the cost of debt, public and private, thereby making them more sustainable, and of exerting downward pressure on the exchange rate of the euro, boosting external competitiveness at a time when the US and Japanese central banks are seeking to reduce the value of their own currencies, which would automatically push the euro up; and to jointly engage in a coordinated European policy to support growth, by funding research and investing in trans-European transport and electricity and in education and training.

The national productive capacity must be supported and stimulated

The lack of competitiveness of French industry is not reducible to a problem of labour costs. And it is well known that a downward spiral of wage moderation and social dumping, which we can already see is wreaking havoc in Europe, can only lead the euro zone into a deflationary spiral, comparable to what these same countries vainly attempted in the 1930s in their "every man for himself" effort to escape the Great Depression.

Reducing social spending cannot therefore be an answer, while rising unemployment and the precarious situation of an

increasing number of households, workers and retirees are pushing up the needs on all sides. Lowering wages, as some countries have done (Greece and Ireland in particular), either directly or through an increase in working hours without an increase in pay, is not a solution, as wage deflation will further depress demand and thereby feed yet another round of social dumping in Europe.

Improving cost competitiveness by reducing the charges on wages may be part of the solution. But this option does not necessarily send the right signals to businesses and will not necessarily lead to a decrease in their selling prices or an increase in hiring: windfall gains are inevitable, and the greatest affluence is likely to go to shareholders as much as to customers and employees. Reductions in social security contributions could be targeted for certain levels of pay, but they cannot be sectoral or conditional or else they would violate European rules on competition.

It is also necessary to encourage and assist French companies in modernizing their supply capacity. The new Public Investment Bank [*Banque publique d'investissement* – BPI] can help by funding promising projects. But we can also make use of the taxation of corporate profits, including through incentives for investment and research that allow tax credits and depreciation rules: this is a way of more directly using incentives for businesses and conditioning public support on conduct that is likely to improve their competitiveness.

Environmental taxation: a lever for long-term competitiveness

Which charges should now bear the cost of these measures to boost business? Discussions on the respective advantages and disadvantages of VAT and the CSG tax abound. Suffice it to recall here that the VAT has been created to anticipate the reduction in tariff protection, which it replaces very effectively without discriminating on the domestic market between domestic products and imports but while exempting

exports: an increase in VAT therefore differs little from a devaluation, with very similar pros and cons, especially with regard to its non-cooperative character within the euro zone. But also recall (see our post of July 2012) that consumption is now relatively less taxed in France than a few years ago, and less than in many of our European partners.

The recourse to a genuine environmental tax would, with regard to the other options for financing these concessions, have the great advantage of promoting sectors that are less polluting and less dependent on fossil fuels – while at the same time diminishing our problems with trade balances, which are partly due to our energy imports – and putting in place the right price and cost incentives for both businesses and consumers. In particular, taking a serious approach to the energy transition demands the introduction of an ambitious carbon tax that is better designed than the one that was censored by the *Conseil constitutionnel* in 2009. Its creation and its step-by-step implementation need to be accompanied by reforming both the direct levies on household income and the main means-tested benefits so that compensation is kept under good control (cf. article in the [work “Réforme fiscale”, April 2012](#)).

A “competitiveness shock” therefore, but also a “sustainable competitiveness pact”, which encourages French companies to take the right paths by making good choices for the future.

[1] See in particular the [post of 20 July 2012](#).

Pigeons: how to tax capital gains (1/2)

By [Guillaume Allègre](#) and [Xavier Timbeau](#)

After having proposed in the [2013 Budget Bill](#) to tax gains from the sale of securities at the progressive scale used by France's income tax, and no longer at a proportional rate of 19%, the government has now promised to correct its work under the pressure of a group of entrepreneurs who rallied on the social networks under the hashtag #geonpi ("pigeons", using French verlan slang, which inverts syllables). An [amendment to the Bill](#) was passed to this effect. Here we discuss the equitable taxation of capital gains on securities. In a second post, we will discuss the specificity of entrepreneurship.

The Budget Bill reflects François Hollande's commitment to enact a major tax reform to make the contribution of each fairer: "capital income will be taxed just like work income" (Commitment 14 of the 60 commitments for France). When the capital results from the saving of employment income that was paid at a "normal" rate, taxing it poses the problem of double taxation and may seem questionable. Note, however, that in a financialized economy income from capital is not simply the result of saving, but also the direct result of an activity (see issue 122 of the special *revue de l'OFCE* issue on tax reform, and in particular Allègre, Plane and Timbeau on "Réformer la fiscalité du patrimoine? "Reforming wealth taxation"). In this sense, capital income derives from households' ability to pay, just as does labour income. The progressive tax on income must apply to all income, whether it comes from capital or labour, in order to respect the principle of horizontal equity, *i.e.* "on equal income, equal

tax”.

With respect to gains on disposal, only the change in the real value of the capital can be considered as income: if the value of a good has increased at the same rate as inflation, the nominal gain, even if positive, does not cover the implicit cost of ownership. The Bill provided that gains on disposals are entitled to an allowance based on the length of holding, which was copied from that applicable to real estate gains. The amendment reduces the durations of holding relative to the original text:

– the capital gains taxable at the income tax rate are reduced by an allowance equal to:

a) 20% of their value when the shares, units, rights or securities have been held for at least two years and less than four years at the date of sale;

b) 30% of their value when the stocks, units, rights or securities have been held for at least four years and less than six years at the date of sale;

c) 40% of their value when the stocks, units, rights or securities have been held for at least six years.

This type of allowance on the nominal capital gain is a poor instrument for taking account of inflation: if the variation of the real value of the capital is zero, then the tax should be zero (there is no real income), whereas an allowance will only reduce it; and on the contrary, if the change in the real value of the capital is much higher than inflation, then the allowance will be too favourable; the allowance is a fixed amount based on increments, while price rises are a continuous phenomenon. At least the allowance does not reach 100%, which is still the case for most real estate capital gains, which are totally exempt from gains on property that has been held 30 years. A good system would not apply an allowance to the nominal gain, but would actualize the purchase price using an

index that reflects prices, which would make it possible to determine changes in the real value of the asset.

Examples: a good is purchased in January 2000 for 100. It is re-sold for 200 in January 2011. The nominal gain is 100. The allowance of 40% applies, and hence, in the system proposed by the government, the taxation would be on 60, and incorporated in the income tax. The variation in the real value of the capital is 79, which is the most reasonable basis for the taxation (we are not interested here in the rate of taxation, but the taxable base).

If, however, in January 2011 the property were re-sold for 120, the amount used by the allowance system would be 8, whereas the variation in the real value of the capital would be -1.

The following table shows the tax base according to the allowance system and the change in the real value of the capital (in parentheses) based on the re-sale value and on the date of acquisition for a good acquired for a value of 100 and re-sold in 2012.

Year of purchase	1990	1995	2000	2005	2010	2012
Re-sale value						
110	6 (-36)	6 (-22)	6 (-14)	6 (-2)	8 (6)	10 (10)
150	30 (4)	30 (18)	30 (26)	30 (38)	40 (46)	50 (50)
200	60 (54)	60 (68)	60 (76)	60 (88)	80 (96)	100 (100)
250	90 (104)	90 (118)	90 (126)	90 (138)	120 (146)	150 (150)

Note on interpretation: For a good purchased at 100 in 1990 and resold at 110 in 2012, the tax base after deduction of 40% is 6 while the change in the real value of the capital is -36, given inflation. While the economic income is negative (there is a loss of purchasing power), with the allowance system the tax base increases. For a good purchased at 100 in 2005 and resold at 250 in 2012, the tax base after deduction is 90, while the change in the real value of the capital is 138: the allowance system is very favourable when the gain is large.

The tax base should be the capital gain after taking into account the inflation tax (variation in the real value of the capital). But this tax base should not be directly subject to a progressive tax scale. Gains on disposals are in fact deferred and should be subject to a charge equivalent to that on a regular income throughout the ownership period. Smoothing with a quotient that varies with the holding period deals with this point. This kind of system divides the income by the number of years held [1], applying the progressive scale to this "regular income equivalent", while adding the household's other income for the current year, then multiplying the increase in the tax related to the exceptional income by the number of years held [2]. An alternative is to tax the capital gains upon disposal at a constant rate equal to the principal marginal rate (30%, to which should be added the CSG wealth tax).

The following points need to be added to the comments above:

- General clearing systems between gains and losses over a long period (currently 10 years) make it possible to take into account risks and potential losses, at least for diversified investors;
- As income from employment can easily be converted into capital income (through various financial instruments and portage arrangements), aligning the two taxes could limit the temptations of tax optimization, which opens the door to tax avoidance;
- In this respect, an Exit Tax, based on the unrealized capital gains, could be used to minimize the interest of becoming a tax exile, which increases with accumulated gains and tax potential.

Donations, especially when they are made outside inheritance, should not be used to erase capital gains, as is currently the case. This provision, which was initially intended to avoid double taxation, can now be used to completely escape taxation.

[\[1\]](#) Based on the equivalence of tax treatment for a regular income and an exceptional income, it appears that the division is made using a coefficient that depends on the interest rate. In practice, for low interest rates, this coefficient is equal to the number of years of ownership.

[\[2\]](#) This calculation is equivalent to regular taxation over time if the household's current earnings are representative of its income (assuming regular income) for the duration of ownership and if the tax schedule is relatively stable.

Setting expectations carefully

[Zakaria Babutsidze](#)

We all base certain our decisions on expectations. We buy new products because we expect that they carry certain quality, we vote for certain candidates because we expect they will do a “good job”, etc. However, recent research suggests that our expectations affect not only decisions. They also affect the level of enjoyment we derive from taking these decisions (or from experiencing their consequences). In economic terms it means that level of utility derived from the consumption of a product is affected by the expectations of the consumer. Even more technically, we say that people possess expectation-based reference-dependent preferences.

Consider a situation where a decision maker has to make an action. The level of the satisfaction that she will extract from this action (denote this value by x) is not perfectly known to her before the action is taken. This level of satisfaction is realized afterwards. However, a decision-maker has an expectation of what that level might be before making the decision (denote this value by y). A simple interpretation of the theory suggests then that mismatch between x and y will affect the actual satisfaction derived from the action. In particular, if $y-x < 0$, which means that realized satisfaction exceeded expectations then consumer gets an extra boost in satisfaction level and ultimate level of satisfaction is in fact above x . However, if consumer gets disappointed ($y-x > 0$) his satisfaction will be lower than x .

How these satisfaction-affecting expectations are formed is another matter. In this respect we can imagine certain number of opportunities given to the decision-maker to decide on the final expectation that he will base his decision on. What complicates the calculation of the final impression is that early impressions actually affect the later ones. Therefore, more opportunities there are to form the impression harder it is to detect the actual pattern of expectation formation.

Experimental evidence supporting the principles underlying expectation-based reference-dependent preferences is mounting as this entry is being written ([Crawford and Meng, 2011](#); [Pope and Schweitzer, 2011](#); [Gill and Prowse, 2012](#)). I have discussed certain business and economic implications of these principles in a [recent OFCE working paper](#). For example, the mechanism implies that advertising campaigns can get wasteful not only from social, but also from individual producer's point of view as they may scare off potential customers instead of attracting them.

What is interesting is the fact that this principle seems to have been known for advertisers, media strategists and business practitioners for some time now ([Parasuraman et al.,](#)

[1991](#); [Dixon et al., 2010](#)). In fact, we can even speculate that this principle is known for certain politicians (or at least members of their staff).

Take a look at the current US presidential campaign. More precisely at the three debates held between the two presidential candidates (Democrat incumbent Barak Obama and Republican challenger Mitt Romney) that were held on October 3rd, 16th and 22nd. President Obama is known to have lost the first debate and won the third one, while the second debate was called a draw. Now, what is important to understand is that there is no actual score. These “scores” were simply based on the feelings of the electorate surveyed after each debate. These debates can be seen as opportunities to the voters to form their expectations based on which they will cast their votes on November 6.

Sequencing in results has been clearly beneficial for Mr Obama for few different reasons. For example, psychologists have a memory “bin” model of impression formation where the last piece of information received is the most relevant piece in determining the decision ([Wyer and Srull, 1989](#); [Babutsidze, 2012](#)). Another reason why the sequencing favors the incumbent is that voters usually prefer voting for candidates that are on a winning streak to voting for those on a losing streak.

However, what expectation-based reference-dependent preferences can offer is the insight into the judgment of voters on the outcome of single debates. The theory implies that voters would give higher appraisal to the positive performance of the candidate when they expect him not to do well compared to when they expect him to perform well. This means voters would judge President Obama’s performance to be poorer hadn’t they been “primed” by the results of the first

two debates.

Presidential candidates might not know about this theory, but Mr Obama tried to use the principle (consciously or unconsciously) by saying that: [“Governor Romney, he’s a good debater. I’m just okay”](#) just before the first debate. The fact is that the strategy to set voter expectations low has not been sufficient to convince enough voters that his poor performance was satisfactory. Perhaps this was the case because it indeed was very hard to set expectations lower than those set by Mr Romney who has provided meaty [gaffe](#) after [gaffe](#) throughout the campaign.

However, the lost first debate might actually benefit President Obama. Somewhat counter-intuitive suggestion of the theory is that had he performed well during the first debate, he’d have *a higher likelihood of losing elections*.